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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,049	06/24/2003	Alan James Maple	70933-0142	1048
20915	7590	12/15/2004	EXAMINER	
MCGARRY BAIR PC 171 MONROE AVENUE, N.W. SUITE 600 GRAND RAPIDS, MI 49503			HUANG, SIHONG	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,049

Applicant(s)

MAPLE ET AL.

Examiner

Sihong Huang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Jun 24 & 27, 2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 and 12-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Maple et al. (GB 2353425 A).

Regarding claim 1, Maple et al disclosed a security system for a compartment having a closure member, which security system is arranged to permit sealing of the closure member and to monitor a sealed status thereof, the security system (Fig. 2) comprising:

a detector (33) for sensing opening and closing movement of the closure member (i.e., door) and providing a detector output (page 5, lines 11-12 and page 9, line 9);

a first input device (the security key, page 12, lines 7-10) providing an electrical first device output, the first input device being operable solely by means of an authorized user (the security key is only available to authorized personnel, page 12, lines 7-10) and having a first function of signifying sealing of the compartment (on door sealing, page 12, lines 7-10);

a second input device (36) providing an electrical second device output, and the second input device being operable any person (as disclosed on page 6, lines 9-11, switch 36 is a user-actuable switch which is in form of a push button that can be actuated by any user) and having a second function of checking the sealed status of compartment (switch 36 is for compartment status verification, see second paragraph on page 6);

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an indicator (L1, L2, L3) having at least first and second states (see page 6) indicative of whether or not unauthorized access has been made to the compartment once sealed; and

an access verification controller (microprocessor unit 30) arranged to control the indicator depending upon said outputs received from the detector and the input devices.

Regarding claim 2, the first input device of Maple et al is key-operated (page 12, lines 8-9).

Regarding claim 3, the indicator has first and second indicator lights (Lamps L1, L2, L3).

Regarding claim 4, the first state of the indicator (for example, Lamp L1) corresponding to the closure member having been sealed closed by an authorized user and the compartment has not been opened thereafter (for example, “Door seal OK, Load acceptable”, see page 6, second paragraph and page 9, lines 17-19).

Regarding claim 5, the second state of the indicator (Lamp 2) corresponds to the closure member having been opened at least once, following sealing by an authorized. As disclosed on page 8, lines 8-9 and 18-20 and page 11, lines 7-10, the vehicle is loaded with goods to be delivered to one or more delivery points. Upon completion of unloading of the vehicle at the first delivery location, the microprocessor unit records the status and energizes Lamp 2. Note, in order for the first delivery location to unload the goods, the door must be opened (“opened at least once”) in the first delivered location and sealed again for the next delivery location. The open and reseal actions cause Lamp 2 to display the station “Door sealed for next delivery”. Therefore, Lamp 2 in a way is indicating the door has been opened at least once (for example,

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opened at first delivery location), following sealing by an authorized user (for example, the authorized personnel seals the door at the distribution depot).

Regarding claim 6, the indicator of Maple et al has a third state (Lamp L3) which indicates whether access has been made to the compartment, once sealed (“Door seal broken”).

Regarding claim 7, the system of Maple et al includes three indicator Lamps L1, L2 and L3 for indicating three states.

Regarding claim 8, the first state of the indicator (for example, Lamp L1) corresponding to the closure member having been sealed closed by an authorized user and the compartment has not been opened thereafter (for example, “Door seal OK, Load acceptable”).

Regarding claims 9 and 10, the second state as indicated by the second light (Lamp L2) corresponds to the closure member (door) having been opened only once (for example, opened at the first delivery location, since it is opened at first delivery location, it is opened only once), following sealing by an authorized user (for example, by authorized user at the warehouse or distribution depot), and the second state also corresponds to the closure member (door) having been sealed (for example, after the door opened for unloading at the first delivery location, an authorized user at the first delivery location sealed door again for the next delivery location) by an authorized user, following a previous sealing by an authorized user (the previous sealing was done at the warehouse or distribution depot). Also see explanation to claim 5 above.

Regarding claim 12, as disclosed by Maple et al on page 4, last paragraph, the compartment comprises a goods-carrying compartment of a commercial vehicle and the closure member comprises a closable access door to the compartment.

Regarding claim 13, the CPU 30 is programmable microprocessor which inherently runs on a control program.

Regarding claims 14 and 15, the microprocessor unit 30 of Maple et al records and retains data for subsequent analysis. The record includes all door movements, operations of the various user-actuated components, personnel carrying out the operations/deliveries/collections, times and dates, etc. As disclosed in second paragraph on page 13, the stored or recorded data can be downloaded via wire or wireless to a computer for subsequent analysis.

Regarding claim 16, Maple et al disclosed a security system as discussed above in claim 1. As disclosed by Maple et al (also discussed above with respect to claims 3-10), the system includes an indicator having first (L1), second (L2) and third (L3) states, wherein the first state (L1) of the indicator corresponds to the closure member (door) having been sealed closed by an authorized person and the compartment has not be opened thereafter ("Door seal OK, Load acceptable"), the second state (L2) of the indicator corresponds to the closure member (door) having been opened at least once (for example, opened at the first delivery location for unloading) following sealing by authorized user (for example, sealing at the warehouse or distribution depot by an authorized user) and then resealed (for example, after opening the door for unloading the good at the first delivery location, the authorized user resealed the door again for delivery to the next location) by an authorized user , and the third state (L3) of the indicator corresponds to the closure member (door) having been opened following sealing (for example, sealed at warehouse or distribution depot or other authorized delivery locations) by an authorized user and then sealed again by other than an authorized user (as disclosed on page 7, lines 16-18 and page 10, lines 1-8 and page 11, lines 13-16, that is, after the door is sealed by an authorized

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user at warehouse or distribution depot, the door may be opened by unauthorized persons (other than an authorized user) and stealing or unloading the goods and then re-closed or sealed during the delivery, such activities will cause the Lamp 3 to light up.

Claim 17 is rejected for the same reason as for claim 12 as discussed above.

Regarding claim 18, Maple et al also disclosed a link (for example, steel or electronic sensing cable or fiber optic cable (page 13, last paragraph)).

Claim 19 is rejected for the same reason as for claim 2 as discussed above.

Regarding claim 20, the second input device of Maple et al includes a manually-operable switch (36, second paragraph on page 6).

Claim 21 is rejected for the same reason as for claim 13.

Claim 22 is rejected for the same reason as for claim 14.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maple et al. (GB 2353425 A).

Maple et al disclosed the security system as discussed above (Fig. 2, second embodiment). As disclosed by Maple et al, the third state indicates unauthorized opening and closing of the door following the sealing by an authorized user. The second embodiment (Fig. 2) of Maple et al differs from **claim 11** in that it does not disclose that the L3 indicates the closure

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member (door) has been opened more than once. However, Maple et al in their first embodiment (Fig. 1) teach such (page 2, lines 22-23). Maple et al teach that an indicator can be used to indicate that a door has been opened for a second time (more than once). Based on this teaching and since the microprocessor of Maple et al records all the door movements or operations, it would have been obvious to a person having ordinary skill in the art at the time of the invention to program the L3 to indicate the door has been open more than once. One motivation will be allowing authorized user or users to know how many times the door has been opened in order to provide better monitoring of the compartment goods.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art references Denekamp et al. (US 4,750,197), Kuma (US 5,907,286), Mellen et al. (US 2001/0015691 A1), Yagesh (US 2004/0113783 A1), Crisp (US 2003/0102957 A1), Entrekin (US 2004/0108938 A1), Mills (US 5,615,247), Houser (US 5,656,996), Leck et al. (US 6,420,971 B1), Auerbach et al. (US 6,753,775 B2), Kadner et al. (US 6,069,563) and Hisano (US 2003/0160695 A1) are cited show other electronic seals/locks.

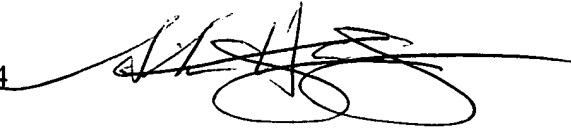
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sihong Huang whose telephone number is 571-272-2958. The examiner can normally be reached on Mon, Thu & Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sihong Huang
December 2, 2004

A handwritten signature in black ink, appearing to be 'Sihong Huang', written over a horizontal line.